1   <u>VI. CLAIMS</u>

2   WHAT IS CLAIMED IS:

3   1.   A method of product development and commercialization comprising:

4   (a)   determining customer requirements for a product;

5   (b)   determining the return on investment of developing said product per
6   said customer requirements;

7   (c)   setting final requirements;

8   (d)   approving said final requirements;

9   (e)   selecting a base technology;

10   (f)   modifying said base technology to meet said final requirements;

11   (g)   approving said base technology selection and said modifications;

12   (h)   testing said modified base technology to verify it meets said final
13   requirements;

14   (i)   approving said testing of said modified base technology;

15   (j)   checking compliance with at least a portion of the relevant laws and
16   regulations of at least a portion of the jurisdictions where the modified
17   base technology will be made, transported, or sold;

18   (k)   approving said assurance of compliance; and

1   (l)   manufacturing/commercializing said modified base technology.

2   2.   The method of claim 1 further comprising storing all data entered, retrieved,
3   processed, created, stored, or modified in one or more central or distributed
4   mutually accessible databases.

5   3.   The method of claim 1 further comprising sending an electronic mail
6   notification to a participant in the method or an interested person upon
7   completion of one of the steps of the method.

8   4.   The method of claim 2, wherein all participants in the method and
9   authorized persons may access at least a portion of said database.

10   5.   The method of claim 4, wherein said access includes a plurality of
11   pre-defined views, thereby permitting quick information sorting.

12   6.   The method of claim 4, wherein said access to said database is available
13   globally from any personal computer having installed thereon a client
14   application configured to perform database management system functions
15   with said database and having a network connection configured to allow
16   communication between said client application and said database.

17   7.   The method of claim 1, wherein the steps are performed sequentially such
18   that a later step is not performed until all earlier steps are completed.

19   8.   The method of claim 7, further comprising locking at least a portion of said
20   steps prior to the completion of all earlier steps and unlocking said steps
21   upon completion of all earlier steps, thereby preventing entering a step out
22   of order without authorization.

1   9.   The method of claim 1, further comprising locking at least a portion of said

2   steps after their completion, thereby preventing revision of said steps

3   without authorization.

4   10. The method of claim 1, further comprising terminating the method at any

5   step, wherein said termination prevents further revision of any step in the

6   method.

7   11. The method of claim 1 further comprising a step to maintain version control

8   of said approved final requirements in step (d), said approved base

9   technology selection and modifications in step (g), or said approved

10   qualification of modified base technology in step (i).

11   12. The method of claim 1, further comprising sending an electronic mail

12   notification to a participant in the method or an interested person upon

13   completion of one of the steps of the method.

14   13. The method of claim 1, further comprising recording in said database action

15   items for completing one or more steps of the method, electronically

16   notifying the responsible persons of said actions items, and tracking

17   completion of said action items.

18   14. The method of claim 1, wherein one or more of said steps is at least in part

19   completed by selecting items from a menu, list box, drop down list, or other

20   selection device available in a personal computer graphical user interface,

21   thereby reducing typing time and errors.

22   15. The method of claim 1, further comprising plotting the actual versus

23   planned progress of said steps on a timeline, for measuring and improving

24   performance and productivity of practicing said method.

1   16.   A method of product development and commercialization comprising:

2   (a)   determining customer requirements for a product;

3   (b)   storing said requirements in a computer readable database;

4   (c)   determining the return on investment of developing said product per
5   said customer requirements;

6   (d)   storing said return on investment in said computer readable database;

7   (e)   setting final requirements;

8   (f)   storing said final requirements in said computer readable database;

9   (g)   approving said final requirements;

10   (h)   storing said approval in said computer readable database;

11   (i)   selecting a base technology;

12   (j)   storing said selection in said computer readable database;

13   (k)   modifying said base technology to meet said final requirements;

14   (l)   storing information of said modification in said computer readable
15   database;

16   (m)   approving said base technology selection and said modifications;

17   (n)   storing said approval in said computer readable database;

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1   (o)   testing said modified base technology to verify it meets said final
2   requirements;

3   (p)   storing information from said testing in said computer readable
4   database;

5   (q)   approving said testing of said modified base technology;

6   (r)   storing said approval in said computer readable database;

7   (s)   checking compliance with at least a portion of the relevant laws and
8   regulations of at least a portion of the jurisdictions where the modified
9   base technology will be made, transported, or sold;

10   (t)   approving said checking of compliance;

11   (u)   storing said approval in said computer readable database; and

12   (v)   commercializing said modified base technology; and

13   (w) approving said commercialization and thereby locking all steps of said
14   method, thereby preventing any further revision of said steps.

15 17. The method of claim 16, further comprising storing all data entered,
16   retrieved, processed, created, stored, or modified in one or more central or
17   distributed mutually accessible databases.

18 18. The method of claim 16, wherein said access to said database is available
19   globally from any personal computer having suitable client software
20   installed and suitable network connectivity.

1   19.   The method of claim 16, wherein all participants in the method and

2   authorized persons may access at least a portion of said database, and the

3   graphical user interface presented matches the person's type of database

4   access.

5   20.   The method of claim 16, wherein said access includes a plurality of

6   pre-defined views, thereby permitting quick information sorting and

7   searching.

8   21.   The method of claim 16, wherein the steps are performed sequentially such

9   that a later step is not performed until all earlier steps are completed.

10   22.   The method of claim 21, further comprising locking at least a portion of said

11   steps prior to the completion of all earlier steps and unlocking said steps

12   upon completion of all earlier steps, thereby preventing entering a step out

13   of order without authorization.

14   23.   The method of claim 16, further comprising locking at least a portion of said

15   steps after their completion, thereby preventing revision of said steps

16   without authorization.

17   24.   The method of claim 16, further comprising maintaining version control of

18   approved final requirements, approved base technology selection and

19   modifications, or approved qualification of modified base technology.

20   25.   The method of claim 16, further comprising terminating the method at any

21   step, wherein said termination prevents further revision of any step in the

22   method.

26. The method of claim 16, further comprising during any step sending an electronic mail notification to a participant in the method or an interested person.

27. The method of claim 16, further comprising automatically sending e-mail notification to participants when any approval step is performed.

28. The method of claim 16, further comprising recording in said database action items for completing one or more steps of the method, electronically notifying the responsible persons of said actions items, and tracking completion of said action items.

29. The method of claim 16, further comprising preventing said approval step (t) from being performed while any action items are incomplete.

30. The method of claim 29, wherein upon a termination of an instance of said method having incomplete action items results in sending an automatic electronic mail notification of said termination and the respective incomplete action item to each respective participant responsible for each respective incomplete action item.

31. The method of claim 16, wherein one or more of said steps is at least in part completed by selecting items from a menu, list box, drop down list, or other selection device available in a personal computer graphical user interface, thereby reducing typing time and errors.

32. The method of claim 16, wherein database users can enter new items in menus, list boxes, drop down lists or other selection devices after which these new items become part of the selection lists for instances of said method.

1   33.   The method of claim 16, wherein at least a portion of said steps comprise

2   copying template forms that are stored in the database thereby insuring

3   data consistency,

4   34.   The method of claim 33, wherein said template forms are revisable at any

5   time by authorized administrators and wherein upon said revision the

6   template forms become immediately available for use by future instances of

7   said method.

8   35.   The method of claim 16, wherein reference forms are stored in the

9   database and are made available to users thereby providing assistance in

10   completing said steps.

11   36.   The method of claim 35, wherein said reference forms are revisable at any

12   time by authorized administrators and wherein upon said revision the

13   reference forms become immediately available for use by future instances

14   of said method.

15   37.   The method of claim 16, wherein administration of the database comprises

16   providing, changing or revoking user access, maintaining items in various

17   selection lists, maintaining template forms, reference forms and help forms,

18   and wherein said administration is performed only by authorized persons

19   38.   The method of claim 37, further comprising performing said administration

20   in a graphical user interface and wherein said administration does not

21   require knowledge of computing languages.

22   39.   A method of product development comprising:

23   (a)   determining customer requirements for a product;

1   (b)   storing said requirements in a computer readable database;

2   (c)   evaluating economics of developing said product per said customer

3   requirements;

4   (d)   storing said evaluation in said computer readable database;

5   (e)   selecting a base technology;

6   (f)   storing said selection in said computer readable database;

7   (g)   determining modifications needed of said base technology to meet

8   said final requirements;

9   (h)   storing information of said determination in said computer readable

10   database; and

11   (i)   testing said determination to verify it meets said final requirements;

12   and

13   (j)   storing details and results of said testing in said computer readable

14   database.

15 40.   The method of claim 39, further comprising after said storing step (j), a step

16   for commercializing said modifying base technology.

17 41.   The method of claim 39, further comprising storing all data entered,

18   retrieved, processed, created, stored, or modified in one or more central or

19   distributed databases.

1   42.   The method of claim 39, wherein access to said database is available
2   globally from any personal computer having suitable client software
3   installed and suitable network connectivity.

4   43.   The method of claim 39, wherein all participants in the method and
5   authorized persons may access at least a portion of said database, and the
6   graphical user interface presented matches the person's type of database
7   access.

8   44.   The method of claim 39, wherein said access includes a plurality of
9   pre-defined views.

10 45.   The method of claim 39, wherein the steps are performed in sequentially
11   such that a later step is not performed until all earlier steps are completed.

12 46.   The method of claim 45, further comprising locking at least a portion of said
13   steps prior to the completion of all earlier steps and unlocking said steps
14   upon completion of all earlier steps, thereby preventing entering a step out
15   of order without authorization.

16 47.   The method of claim 39, further comprising locking at least a portion of said
17   steps after their completion, thereby preventing revision of said steps
18   without authorization.

19 48.   The method of claim 39, further comprising terminating the method at any
20   step, wherein said termination prevents further revision of any step in the
21   method.

1   49.   The method of claim 39, further comprising during any step sending an
2   electronic mail notification to a participant in the method or an interested
3   person.

4   50.   The method of claim 39, further comprising automatically sending e-mail
5   notification to participants when any approval step is performed.

6   51.   The method of claim 39, further comprising recording in said database
7   action items for completing one or more steps of the method, electronically
8   notifying the responsible persons of said actions items, and tracking
9   completion of said action items.

10   52.   The method of claim 39, further comprising preventing said approval step (t)
11   from being performed while any action items are incomplete.

12   53.   The method of claim 39, wherein upon a termination of an instance of said
13   method having incomplete action items results in sending an automatic
14   electronic mail notification of said termination and the respective incomplete
15   action item to each respective participant responsible for each respective
16   incomplete action item.

17   54.   The method of claim 39, wherein administration of the database comprises
18   providing, changing or revoking user access, maintaining items in various
19   selection lists, maintaining template forms, reference forms and help forms,
20   and wherein said administration is performed only by authorized persons

21   55.   The method of claim 54, further comprising performing said administration
22   in a graphical user interface and wherein said administration does not
23   require knowledge of computing languages.

1   56. A method of product development comprising:

2   (a) determining customer requirements for a product;

3   (b) storing said requirements in a computer readable database;

4   (c) determining if base technology modifications are needed to meet said
5   customer requirements;

6   (d) if base technology modifications are needed to meet said customer
7   requirements, then said method further comprises:

8   (1) selecting a base technology;

9   (2) storing said selection in said computer readable database;

10   (3) determining modifications needed of said base technology to
11   meet said final requirements;

12   (4) storing information of said determination in said computer
13   readable database; and

14   (5) if the cost of said modification exceeds a predetermined amount,
15   then said method further comprises:

16   (a) evaluating economics of developing said product per said
17   customer requirements;

18   (b) storing said evaluation in said computer readable database;

1   (c)   qualifying said determination of modifications to verify it
2   meets said final requirements;

3   (d)   storing said qualification in said computer readable
4   database; and

5   (e)   manufacturing/commercializing said modified base
6   technology.

7   57.   The method of claim 56, wherein said access to said database is available
8   globally from any personal computer having suitable client software
9   installed and suitable network connectivity.

10   58.   The method of claim 56, wherein all participants in the method and
11   authorized persons may access at least a portion of said database, and the
12   graphical user interface presented matches the person's type of database
13   access.

14   59.   The method of claim 56, further comprising locking at least a portion of said
15   steps prior to the completion of all earlier steps and unlocking said steps
16   upon completion of all earlier steps, thereby preventing entering a step out
17   of order without authorization.

18   60.   The method of claim 56, further comprising during any step sending an
19   electronic mail notification to a participant in the method or an interested
20   person.

21   61.   The method of claim 56, further comprising recording in said database
22   action items for completing one or more steps of the method, electronically

1 notifying the responsible persons of said actions items, and tracking
2 completion of said action items.

3 62. The method of claim 56, wherein upon a termination of an instance of said
4 method having incomplete action items results in sending an automatic
5 electronic mail notification of said termination and the respective incomplete
6 action item to each respective participant responsible for each respective
7 incomplete action item.

8 63. The method of claim 16, wherein one or more of said steps is at least in
9 part completed by selecting items from a menu, list box, drop down list, or
10 other selection device available in a personal computer graphical user
11 interface, thereby reducing typing time and errors.

12 64. The method of claim 56, wherein administration of the database comprises
13 providing, changing or revoking user access, maintaining items in various
14 selection lists, maintaining template forms, reference forms and help forms,
15 and wherein said administration is performed only by authorized persons

16 65. The method of claim 64, further comprising performing said administration
17 in a graphical user interface and wherein said administration does not
18 require knowledge of computing languages.

19 66. A product development and commercialization management information
20 system, said system comprising:

21 (a) means for storing, retrieving, searching, modifying, and reporting
22 customer requirements for a product;

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1 (b) means for storing, retrieving, searching, modifying, and reporting an
2 evaluation of the economics of developing said product per said
3 customer requirements;

4 (c) means for storing, retrieving, searching, modifying, and reporting a
5 selection of a base technology;

6 (d) means for storing, retrieving, searching, modifying, and reporting a
7 determination of modifications needed of said base technology to
8 meet said final requirements; and

9 (e) means for storing, retrieving, searching, modifying, and reporting
10 testing details and results of said determination to verify it meets said
11 final requirements.

12 67. A product development and commercialization management information
13 system comprising:

14 (a) a collaborative work space, wherein multiple participants can
15 individually and jointly work on a project:

16 (1) configured at least partially automating workflow of product
17 development and commercialization projects from determining
18 customer requirements and financial analysis of project viability,
19 through determining a base technology, determining any needed
20 modifications of said base technology, and testing said modified
21 base technology to verify compliance with customer
22 requirements, and configured for adding/changing the
23 participants in a project;

1   (2)   configured for assigning, tracking and providing notification of
2   tasks relating to a product development project or group of
3   projects;

4   (3)   configured for providing a collaborative work space comprising a
5   secure/searchable communication repository linked to product
6   development projects or logical grouping of projects and their
7   tasks, for communications with and between project participants
8   and customers, configured for recording, channeling, and
9   archiving said communications;

10   (4)   configured for financial tracking and/or forecasting for a project
11   or a logical grouping of projects;

12   (5)   configured for importing lab data;

13   (6)   configured for providing a secure and searchable document
14   repository linked to projects or logical groupings of projects,
15   wherein said documents are in final format; and

16 (b)   a database:

17   (1)   configured for storing a product development project's history
18   and details, said history and details comprising the types of data,
19   time schedules, status of all steps in the project, contact
20   information, results of all steps in the project, and documents
21   and information supporting all steps in the project; and
22

23   (2)   configured for searching said stored history and details and for
24   generating reports from same;

1   (c)   a network for connecting said collaborative workspace and database;
2   and

3   (d)   means for providing for different levels of secure access for different
4   users.

5   68.   The system of claim 67, wherein said network comprises the Internet.

6   69.   The system of claim 67, wherein said collaborative workspace comprises a
7   client application comprising a web browser.